Name:

at1113exam: Expand, factor, and solve quadratics (v215)

1. Expand the following expression into standard form.

$$(5x + 6)(2x + 9)$$

2. Expand the following expression into standard form.

$$(6x - 7)(6x + 7)$$

3. Expand the following expression into standard form.

$$(6x - 7)^2$$

4. Solve the equation.

$$(7x + 8)(2x + 3) \;=\; 0$$

5. Solve the equation.

$$7x^2 + 28x + 21 \;=\; 4x^2 + 2x + 5$$

6. Factor the expression.

$$81x^2 - 64$$

7. Solve the equation with factoring by grouping.

$$15x^2 + 18x - 10x - 12 \;=\; 0$$

8. Factor the expression.

$$x^2 - 7x + 10$$